

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 through 83. (Cancelled).
- 84. (Original) A system for processing a sample comprising a reaction chamber, an ultrasound transducer and a central processing unit.
- 85. (Original) The system of claim 84 comprising more than one transducer.
- 86. (Original) The system of claim 84 further comprising one or more sensors.
- 87. (Original) The system of claim 84 further comprising means for heating or cooling said reaction chamber.
- 88. (Original) The system of claim 84 further comprising a pump.
- 89. (Original) The system of claim 84 further comprising a distributor.
- 90. (Amended) The system of claim 84 wherein said sample is a tissue sample, a membrane, a membrane filter, a tissue sample mounted on a slide, a nucleic acid chip, a microarray of nucleic acid, a microarray of tissue, or an immuno chip.
- 91. (Original) The system of claim 84 further comprising means for sampling reaction fluid.